## IN THE CLAIMS

1 (Currently Amended). A method comprising:

determining channel prediction terms for a channel, from both first channel estimation terms derived from a first common pilot channel signal and second channel estimation terms derived from a second common pilot channel signal; ~~and~~

adaptively calculating channel prediction terms from first and second channel estimation terms by receiving antenna transmission characteristics associated with one or more antennas of a plurality of antennas in order to controllably adjust the future transmission patterns of the channel and selecting at least one antenna transmission characteristics from the antenna transmission characteristics based on the channel prediction terms; and

enabling control over future transmission patterns of the channel using the channel prediction terms.

2 (Original). The method of claim 1, including predicting a future state of the channel at a specified time based on the channel prediction terms.

3 (Original). The method of claim 2, including storing the first and second channel estimation terms in order to determine the channel prediction terms in response to the first and second common pilot channel signals, respectively.

Claims 4 and 5 (Canceled).

6 (Currently Amended). The method of claim ~~4~~ 1, wherein adaptively calculating includes receiving one or more weighted values associated with one or more antennas of a plurality of antennas where said first common pilot channel signal is from a first antenna of the plurality of antennas and said second common pilot channel signal is from a second antenna of the plurality of antennas.

7 (Currently Amended). The method of claim ~~5~~ 1, including using a feedback signal based on the channel prediction terms to control the future transmission patterns of the channel according to the future state of the channel at the specified time.

8 (Original). The method of claim 6, including:

selecting at least one weighted value from the one or more weighted values based on the channel prediction terms;

providing the at least one weighted value to the first and second antennas to accurately assess the future state of the channel at the specified time; and

separating first and second channel propagation paths associated with the first and second antennas based on the first and second common pilot channel signals.

9 (Original). The method of claim 8, including estimating phase and magnitude of the channel for the first and second channel propagation paths to derive the first and second channel estimation terms.

10 (Original). The method of claim 4, wherein the first channel estimation terms correspond to a channel estimation term calculated in at least one iteration prior to a current iteration of the one or more iterations.

11 (Original). The method of claim 10, wherein the second channel estimation terms correspond to a channel estimation term calculated in the current iteration of the one or more iterations.

12 (Original). The method of claim 6, including operating the first and second antennas of the plurality of antennas in a closed loop transmit diversity mode.

13 (Original). The method of claim 12, including providing feedback, including the at least one weighted value of the one or more weighted values, to the first and second antennas of the plurality of antennas.

14 (Original). The method of claim 13, including controlling at the specified time a transmission pattern over the channel from at least one antenna of the first and second antennas to match the future state of the channel and substantially reduce the effective loop delay in the closed loop transmit diversity mode.

15 (Currently Amended). An apparatus comprising:

a communication interface; ~~and~~

a processor communicatively coupled to a communication interface, the processor to determine channel prediction terms for a channel from both first channel estimation terms derived from a first common pilot channel signal and second channel estimation terms derived from a second common pilot channel signal and to enable control over future transmission patterns of the channel using the channel prediction terms; and

a storage coupled to the processor to store the first and second channel estimation terms in order to determine the channel prediction terms in response to the first and second common pilot channel signals, respectively.

16 (Original). The apparatus of claim 15, wherein the processor predicts a future state of the channel at a specified time based on the channel prediction terms.

Claim 17 (Canceled).

18 (Currently Amended). The apparatus of claim ~~17~~ 15, wherein the processor adaptively calculates the channel prediction terms from the first and second channel estimation terms in one or more iterations.

19 (Original). The apparatus of claim 18, wherein the processor:

receives antenna transmission characteristics associated with one or more antennas of a plurality of antennas in order to controllably adjust the future transmission patterns to the channel; and

selects at least one antenna transmission characteristic from the antenna transmission characteristics based on the channel prediction terms.

20 (Original). The apparatus of claim 19, wherein the processor:

provides a feedback signal based on the channel prediction terms to control the future transmission patterns of a transmitter according to the future state of the channel at the specified time.

21 (Original). The apparatus of claim 18, wherein the processor:

receives one or more weighted values associated with one or more antennas of a plurality of antennas, said first common pilot channel signal is from a first antenna of the plurality of antennas and said second common pilot channel signal is from a second antenna of the plurality of antennas to operate first and second antennas in a closed loop transmit diversity mode;

provides feedback having the at least one weighted value of the one or more weighted values to the first and second antennas; and

controls at the specified time the future transmission patterns over the channel from at least the first and second antennas of the plurality of antennas.

22 (Currently Amended). An article comprising a medium storing instructions that enable a processor-based system to:

determine for a channel, channel prediction terms from both first channel estimation terms derived from first common pilot channel signal and second channel estimation terms derived from second common pilot channel signal and adaptively calculate the channel prediction terms by receiving one or more weighted values associated with one or more antennas of a plurality of antennas where said first common pilot channel signal is from a first antenna of the plurality of antennas and said second common pilot channel signal is from a second antenna of the plurality of antennas; and

enable control of future transmission patterns of the channel using the channel prediction terms.

23 (Original). The article of claim 22, further storing instructions that enable the processor-based system to predict a future state of the channel at a specified time based on the channel prediction terms.

24 (Original). The article of claim 23, further storing instructions that enable the processor-based system to store the first and second channel estimation terms in order to determine the channel prediction terms in response to the first and second common pilot channel signals, respectively.

25 (Original). The article of claim 24, further storing instructions that enable the processor-based system to:

adaptively calculate the channel prediction terms from the first and second channel estimation terms in one or more iterations; and

receive antenna transmission characteristics associated with one or more antennas of a plurality of antennas in order to controllably adjust the future transmission patterns of the channel; and

select at least one antenna transmission characteristic from the antenna transmission characteristics based on the channel prediction terms.

26 (Original). The article of claim 25, further storing instructions that enable the processor-based system to:

receive one or more weighted values associated with one or more antennas of a plurality of antennas, said first common pilot channel signal is from a first antenna of the plurality of antennas and said second common pilot channel signal is from a second antenna of the plurality of antennas;

select at least one weighted value from the one or more weighted values based on the channel prediction terms;

provide feedback having the at least one weighted value of the one or more weighted values to the first and second antennas of the plurality of antennas; and

control at the specified time a transmission pattern over the channel from at least one antenna of the first and second antennas.

27 (Currently Amended). A wireless device comprising:

a communication interface;

a processor coupled to the communication interface; and

a storage coupled to the processor, said storage storing instructions to:

determine for a traffic channel directed to the communication interface, channel prediction terms from both first channel estimation terms derived from first common pilot channel signal and second channel estimation terms derived from second common pilot channel signal,

predict a future state of the traffic channel at a specified time based on the channel prediction terms, ~~and~~

control future transmission patterns using the future state of the traffic channel at the specified time; and

the storage to store the first and second channel estimation terms in order to determine the channel prediction terms in response to the first and second common pilot channel signals, respectively.

28 (Original). The wireless device of claim 27 comprises a transceiver adapted to communicate with a base transceiver in a closed loop transmit diversity mode.

29 (Currently Amended). A mobile transceiver comprising:

a communication interface;

a processor coupled to the communication interface; and

a storage coupled to the processor, said storage storing instructions to:

determine for a traffic channel directed to the communication interface, channel prediction terms based on channel estimation terms derived from common pilot channel signals of at least two antennas,

in response to the common pilot channel signals, predict a future state of the traffic channel at a specified time and provide feedback information over a feedback channel, ~~and~~

control future transmission patterns over the at least two antennas using the future state of the traffic channel at the specified time; and

the storage to store the first and second channel estimation terms in order to determine the channel prediction terms in response to the first and second common pilot channel signals, respectively.

30 (Original). The mobile transceiver of claim 29 comprises one or more antennas coupled to the communication interface, said one or more antennas adapted to communicate with a base station in a closed loop transmit diversity mode.